

1 What is claimed is:

2 1. A self-centering mobile, comprising:

3 a frame;

4 a plurality of freely rotatable connectors;

5 a horizontally disposed arm having two ends and a balance point between the two ends,  
6 the arm suspended from the frame at the balance point with one of the freely rotatable  
7 connectors; and

8 a display member suspended from each end of the arm with another one of the freely  
9 rotatable connectors and having a weight so that the arm is balanced when suspended from the  
10 frame at the arm balance point.

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12 2. The mobile of claim 1, wherein the arm comprises a substantially closed loop at the  
13 balance point and at each end of the arm.

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15 3. The mobile of claim 1, wherein the arm comprises a continuous, round rod of  
16 substantially rigid material.

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18 4. The mobile of claim 3, wherein the rod of material comprises spring steel.

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20 5. The mobile of claim 3, wherein the rod of material comprises a coating that includes zinc.

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22 6. The mobile of claim 1, wherein the freely rotatable connectors comprise:

1 a spinner assembly adapted to rotate freely for 360 degrees in both clockwise and  
2 counter-clockwise directions; and  
3 a means for attaching the spinner assembly to the frame and to the arm.

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5 7. The mobile of claim 6, wherein the spinner assembly comprises:

6 a hollow central body having a top and a bottom and an aperture in each of the top and  
7 the bottom; and

8 an eye hook disposed in each of the top and the bottom of the central body, each eye  
9 hook having a base larger than the apertures rotatably secured inside the central body and a hook  
10 portion extending through the aperture.

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12 8. The mobile of claim 6, wherein the means for attaching the spinner assembly to the frame  
13 and to the arm comprises a spring clip formed from a round rod of spring steel, the rod formed  
14 into a substantially closed "S" shape, each end of the rod bent outwardly from the spring clip to  
15 form a receiving channel for receiving the frame and the arm.

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17 9. The mobile of claim 8, wherein the rod of spring steel comprises a coating that includes  
18 zinc.

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20 10. The mobile of claim 6, wherein the means for attaching the spinner assembly to the frame  
21 and to the arm comprises a dual lock snap fastener comprising:

22 a round rod of spring steel formed into an elongated oval-shaped body, the rod  
23 terminating with a first end and an overlapping second end on a first side of the body,

1 wherein the second end is bent approximately perpendicularly to a longitudinal axis of  
2 the fastener across the fastener body and releasably around a second side of the body opposite  
3 the first side to form a first lock biased by the spring steel, and

4 wherein the first end is bent approximately perpendicularly to the longitudinal axis of the  
5 fastener away from the fastener body and releasably around the first side to form a second lock  
6 biased by the spring steel.

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8 11. The mobile of claim 1, wherein a plurality of display members is suspended from at least  
9 one end of the arm, the balance point located on the arm at a pre-determined point such that a  
10 particular combination of display members is balanced.

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12 12. The mobile of claim 11, wherein at least one other arm is suspended from at least one end  
13 of the arm with one of the freely rotatable connectors.

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15 13. The mobile of claim 1, wherein the display member comprises a display enclosure  
16 comprising:

17 a single, flat sheet of transparent material folded over onto itself to form opposing panels  
18 for receiving a substantially flat item for display therebetween;

19 the panels having a top and an aperture near the top and through the panels for connecting  
20 the panels to a freely rotatable connector;

21 the panels spaced apart approximately one mm to form a bottom for supporting the  
22 display item and for facilitating movement of the display item between the panels; and

at least one panel having a cutout near an edge of the panel for facilitating insertion and removal of the display item between the panels.

14. The mobile of claim 13, wherein the sheet of transparent material comprises polyethylene terephthalate glycol.

15. The mobile of claim 13, further comprising a plurality of display enclosures of differing dimensions, a portion of the display enclosures adapted for vertical display and another portion adapted for horizontal display, wherein display enclosures for vertical display and display enclosures for horizontal display having the same dimensions comprise the same weight and are interchangeable.

16. The mobile of claim 1, further comprising a means for stationarily mounting the frame to a surface comprising:

an oblong block of material having a top, a bottom, a front, and a back;

a bore hole extending at least partially downward through the block toward the bottom for fittingly receiving the frame;

a threaded hole through the front of the block approximately perpendicular to and intersecting with the bore hole;

a screw insertable into the threaded hole for tightening against the frame to secure the frame in the bore hole; and

a means for mounting the block to a surface.

1 17. The mobile of claim 16, wherein the means for mounting the block to a surface comprises  
2 a removable adhesive applied to the back of the block.

3  
4 18. The mobile of claim 1, further comprising a means for adjustably mounting the frame to a  
5 surface comprising:

6 a block of material having two holes extending at least partially through the block in  
7 approximately perpendicular directions, one hole comprising a bore hole for fittingly receiving  
8 the frame and the other hole comprising a threaded hole intersecting with the bore hole;

9 a first screw insertable into the threaded hole for tightening against the frame to secure  
10 the frame in the bore hole;

11 a bracket having a surface-mounting portion and a block-mounting portion perpendicular  
12 to the surface-mounting portion;

13 a second screw insertable through another hole in the block perpendicular to the bore hole  
14 and through a threaded hole in the block-mounting portion of the bracket for adjustably securing  
15 the block and frame in a range of positions within an approximately 90 degree angle around an  
16 upright position; and

17 a means for mounting the bracket to a surface.

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19 19. The mobile of claim 18, wherein the means for mounting the bracket to a surface  
20 comprises a removable adhesive applied to the back of the bracket.

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22 20. The mobile of claim 1, further comprising a means for adjustably mounting the frame to a  
23 surface comprising:

1 a circular block of material having a plurality of holes about the circumference and  
2 extending at least partially through the block in approximately perpendicular directions, each  
3 pair of holes comprising a bore hole for fittingly receiving the frame and the other hole  
4 comprising a threaded hole intersecting with the bore hole;

5 a first screw insertable into the threaded hole for tightening against the frame to secure  
6 the frame in the bore hole;

7 a rectangular block of material having a front and a back;

8 a second screw insertable through another threaded hole in the circular block  
9 perpendicular to the plurality of paired bore holes and threaded holes and into a threaded hole in  
10 the front of the rectangular block for adjustably securing the circular block and frame in a range  
11 of positions within a 360 degree span; and

12 a means for mounting the rectangular block to a surface.

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14 21. The mobile of claim 20, wherein the means for mounting the rectangular block to a  
15 surface comprises a removable adhesive applied to the back of the rectangular block.

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17 22. A self-centering mobile, comprising:

18 a frame;

19 a plurality of freely rotatable connectors;

20 a horizontally disposed arm comprising a round rod of zinc-coated spring steel and  
21 having two ends and a balance point between the two ends, the arm suspended from the frame at  
22 the balance point with one of the freely rotatable connectors; and

1 a display member suspended from each end of the arm with another one of the freely  
2 rotatable connectors and having a weight so that the arm is balanced when suspended from the  
3 frame at the arm balance point,

4 wherein the arm comprises a substantially closed loop at the balance point and at each  
5 end of the arm,

6 wherein the freely rotatable connectors comprise a spinner assembly adapted to rotate  
7 freely for 360 degrees in both clockwise and counter-clockwise directions and further comprising  
8 a hollow central body having an aperture in each of a top and a bottom of the central body and an  
9 eye hook disposed in each of the top and the bottom, each eye hook having a base larger than the  
10 apertures rotatably secured inside the central body and a hook portion extending through the  
11 aperture, and a spring clip for attaching the spinner assembly to the frame and to the arm formed  
12 from a round rod of zinc-coated spring steel, the rod formed into a substantially closed "S"  
13 shape, each end of the rod bent outwardly from the spring clip to form a receiving channel for  
14 receiving the frame and the arm.

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16 23. The mobile of claim 22, wherein a plurality of display members is suspended from at  
17 least one end of the arm, the balance point located on the arm at a pre-determined point such that  
18 a particular combination of display members is balanced.

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20 24. The mobile of claim 23, wherein at least one other arm is suspended from at least one end  
21 of the arm with one of the freely rotatable connectors.

1 25. The mobile of claim 22, wherein the display member comprises a display enclosure  
2 comprising:  
3 a single, flat sheet of transparent material folded over onto itself to form opposing panels  
4 for receiving a substantially flat item for display therebetween;  
5 the panels having a top and an aperture near the top and through the panels for connecting  
6 the panels to a freely rotatable connector;  
7 the panels spaced apart approximately one mm to form a bottom for supporting the  
8 display item and for facilitating movement of the display item between the panels; and  
9 at least one panel having a cutout near an edge of the panel for facilitating insertion and  
10 removal of the display item between the panels.

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12 26. The mobile of claim 25, wherein the sheet of transparent material comprises polyethylene  
13 terephthalate glycol.

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15 27. A method of using a self-centering mobile, comprising:  
16 providing a frame, a plurality of freely rotatable connectors, and a horizontally disposed  
17 arm comprising a round rod of spring steel and a substantially closed loop at each of two ends  
18 and at a balance point between the two ends;  
19 suspending the arm from the frame at the balance point with one of the freely rotatable  
20 connectors; and  
21 suspending from each end of the arm with another one of the freely rotatable connectors a  
22 display member having a weight so that the arm is balanced when suspended from the frame at  
23 the arm balance point.



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2 28. The method of claim 27, further comprising suspending each of the arm from the frame  
3 and the display member from each end of the arm with a spring clip formed from a round rod of  
4 spring steel into a substantially closed “S” shape, each end of the rod bent outwardly from the  
5 spring clip to form a receiving channel for receiving the frame and the arm, one of the spring  
6 clips attached to the top and another spring clip attached to the bottom of a spinner assembly  
7 adapted to rotate freely for 360 degrees in both clockwise and counter-clockwise directions.

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9 29. The method of claim 27, further comprising suspending a plurality of display members  
10 from at least one end of the arm, the balance point located on the arm at a pre-determined point  
11 such that a particular combination of display members is balanced.

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13 30. The method of claim 27, further comprising suspending at least one other arm from at  
14 least one end of the arm with one of the freely rotatable connectors.

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